AMENDMENTS TO THE CLAIMS

1. (Currently Amended) An apparatus for forming at least a portion of a semiconductor device, said apparatus comprising:

a reaction chamber for heating a substrate on which the semiconductor device is to be formed;

a load lock chamber for transferring said substrate between said reaction chamber and an external ambient;

a flange having a first end connected to said reaction chamber and a second end connected to said load lock chamber;

a first source for supplying a first treating gas to said reaction chamber;

a first pumping system ~~coupled to said reaction chamber~~ connected to said flange for maintaining said reaction chamber at a first vacuum pressure during the supplying of said first treating gas;

a second source for supplying a second treating gas to said reaction chamber;

a second pumping system ~~coupled to said reaction chamber~~ connected to said first flange for maintaining said reaction chamber at a second vacuum pressure during the supplying of said second treating gas, said second vacuum pressure being lower than said first vacuum pressure; ~~and,~~

a third pumping system ~~coupled to said reaction chamber~~ for transitioning said reaction chamber between said first vacuum pressure and said second vacuum pressure; and

a valve connected to said second end of said flange for isolating said lock chamber from said first, second and third pumping systems.

2. (Original) An apparatus according to claim 1, wherein said reaction chamber, said first source and said first pumping system form at least part of a Low Pressure Chemical

Vapor Deposition (LPCVD) system.

3. (Original) An apparatus according to claim 2, wherein said reaction chamber, said second source and said second pumping system form at least part of an Ultra High Vacuum-Chemical Vapor Deposition (UHV-CVD) system.

4. (Currently Amended) An apparatus according to claim 1, ~~further comprising a load-lock chamber coupled to said reaction chamber for transferring said substrate between said reaction chamber and an external ambient;~~ wherein said load-lock chamber also being coupled to a turbomolecular pump and a mechanical pump in series.

5. (Previously Presented) An apparatus according to claim 1, wherein said third pumping system comprises a cryopump and a scroll pump arranged in series to remove contaminates from said reaction chamber after the supplying of said first treating gas.

6. (Original) An apparatus according to claim 3, further comprising a first pumping system coupled to one end of said reaction chamber and forming therewith a portion of said LPCVD system, and a second pumping system coupled to another end of said reaction chamber and forming therewith a portion of said UHV-CVD system; wherein said first pumping system is also coupled to a roots blower and a mechanical pump in series; and wherein said second pumping system is also coupled to a turbomolecular pump, a roots blower and a mechanical pump in series.

7. (Original) An apparatus according to claim 6, wherein said third pumping system is coupled to said reaction chamber and comprises a cryopump in series with a scroll pump for removing contaminants from said reaction chamber.

8. (Original) An apparatus according to claim 1, wherein said reaction chamber, said first source and said first pumping system form at least a part of a Low Pressure Chemical Vapor Deposition (LPCVD) system for prebaking said substrate in a hydrogen containing gas and for forming silicon containing layers on said substrate; and wherein said reaction chamber, said second source and said second pumping system form at least part of an Ultra High Vacuum-Chemical Vapor Deposition (UHV-CVD) system for forming germanium (Ge), silicon (Si) or SiGe containing layers on said substrate.

9. (Original) An apparatus according to claim 1, wherein said first pumping system comprises a roots blower and a mechanical pump in series.

10. (Original) An apparatus according to claim 1, wherein said second pumping system comprises a turbomolecular pump, a roots blower and a mechanical pump in series.

11. (Original) An apparatus according to claim 1, wherein said third pumping system comprises a cryopump and a scroll pump in series.

12. (Original) An apparatus according to claim 1, wherein said first pumping system comprises a roots blower and a mechanical pump in series; wherein said second pumping system comprises a turbomolecular pump, a roots blower and a mechanical pump in series; and wherein said first pumping system and said second pumping system share the same roots blower and mechanical pump.

Claims 13-20. (Canceled)

21. (New) An apparatus according to claim 1, wherein said third pumping system is connected to said flange.

22. (New) An apparatus according to claim 1 further comprising a second flange connected to said reaction chamber, wherein said third pumping system is connected to said second flange.